UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, ILLINOIS 60604

DATE: OCT 0 7 2019

SUBJECT: CLEAN AIR ACT INSPECTION REPORT
OmniSource, Jackson, Michigan

FROM: David Sutlin, Environmental Engineer
AECAB (MN/OH)

THRU: Brian Dickens, Section Chief
AECAB (MN/OH)

TO: File

BASIC INFORMATION

Facility Name: OmniSource

Facility Location: 711 Lewis Street, Jackson, Michigan

Date of Inspection: August 19, 2019

EPA Inspector(s):
1. David Sutlin, Environmental Engineer
2. Manojkumar Patel, Environmental Engineer

Other Attendees
1. Kevin Gross, Safety/Environmental Manager, OmniSource
2. Douglas McDonald, OmniSource
3. Mike Kovalchick, Senior Environmental Engineer, EGLE
4. Stephanie Weems, Environmental Quality Analyst, EGLE

Contact Email Address: Kevin.Gross@omnisource.com

Purpose of Inspection: To determine compliance with the CAA and the Michigan SIP

Facility Type: Scrap metal recycling

Regulations Central to Inspection: Michigan SIP

Arrival Time: 1:00 PM
Departure Time: 3:15 PM

Inspection Type:
☒ Unannounced Inspection
☐ Announced Inspection

OPENING CONFERENCE

☒ Credentials Presented
☒ CBI warning to facility provided

The following information was obtained verbally from OmniSource unless otherwise noted.

Process Description:
This facility accepts scrap metal including cast iron and carbon steel items, which are cut using shears and/or torches and then resold. Torch cutting operations take place under an enclosure, and emissions are routed to a cartridge-style fabric filter.

Staff Interview:
Torch cutting is performed by contractors who are employees of RJ Industrial, LLC. The torch cutting enclosure and fabric filter have been in operation for approximately two months. The fabric filter contains 96 fire-retardant cartridge filters. Performance of the capture and control system is currently suboptimal, and OmniSource has contracted a third party to test and measure flow rates at various points within the system. To mitigate fire risk from sparks entering the fabric filter, OmniSource had considered installing a spark arrestor, but had determined that this would lead to poor emission capture. Instead, OmniSource is considering installing ¾" screening over the exhaust vents in order to keep larger particles out of the ductwork.

TOUR INFORMATION

EPA toured the facility: Yes

Data Collected and Observations:
While entering the facility, EPA observed some visible emissions exiting the side of the torch-cutting enclosure. EPA later toured the facility and observed fewer visible emissions while inspecting the enclosure. The enclosure features a pitched roof, two sides made of sheet metal, and two open ends covered by rubber flaps. Fumes are exhausted through slots in a cylindrical duct positioned above the torch cutters. The duct extends out through the front of the enclosure and mates up with one of two exhaust branch ducts attached to the fixed fabric filter. The enclosure moves along railroad tracks, back-and-forth over two torching areas such that scrap can be loaded to one area while torch cutting occurs in the other area. Fixed interior walls made of thick metal shield the thin outer walls and rubber flaps of the enclosure from sparks. The fabric filter is stationary.

Photos and/or Videos: were taken during the inspection.

Field Measurements: were not taken during this inspection.

CLOSING CONFERENCE

Requested documents:

- Diagram of ventilation system
- Flow testing scope and results
- Fabric filter operations manual
- Fabric filter pressure drop measurement points
- Third party torch cutting contract

SIGNATURES

Report Author: _____ Date: 10/7/19

Section Chief: Brian Dickens Date: 10/7/19

Facility Name: OmniSource
Facility Location: 711 Lewis Street, Jackson, Michigan
Date of Inspection: August 19, 2019

APPENDIX A: DIGITAL IMAGE LOG

1. Inspector Name: Manojkumar Patel	**2. Date(s) of Inspection:** August 19, 2019
3. Company/Facility Name: OmniSource	**4. Street Address, City, State:** 711 Lewis Street, Jackson, Michigan
5. Number of Images: 21	**6. Archival Record Location:** CD-R labeled as "OmniSource, Jackson, MI; 8-19-19 Inspection; Photos & Videos"

Image Number	File Name	Date and Time (incl. time zone and DST)	Description of Image
1	P8190001.JPG	8/19/2019 13:05	Scrap
2	P8190002.JPG	8/19/2019 13:06	Scrap
3	P8190003.JPG	8/19/2019 13:06	Scrap
4	P8190004.JPG	8/19/2019 13:06	Scrap
5	P8190005.JPG	8/19/2019 13:07	Scrap
6	P8190006.JPG	8/19/2019 13:07	Back side of torching enclosure
7	P8190007.JPG	8/19/2019 13:08	Side panels on enclosure
8	P8190008.JPG	8/19/2019 13:08	Torching enclosure wheel stop
9	P8190009.JPG	8/19/2019 13:09	Fabric filter and air ducts
10	P8190010.JPG	8/19/2019 13:09	Fabric filter with cartridges
11	P8190011.JPG	8/19/2019 13:11	Fabric filter pressure drop readout
12	P8190012.JPG	8/19/2019 13:12	Fabric filter manufacturer's website label
13	P8190013.JPG	8/19/2019 13:12	Fabric filter pulse jet pressure gauge
14	P8190014.JPG	8/19/2019 13:12	Fabric filter label
15	P8190015.JPG	8/19/2019 13:12	Induced draft fan motor
16	P8190016.JPG	8/19/2019 13:14	Conveyor material flaps over opening to enclosure
17	P8190017.MOV	8/19/2019 13:16	Video of torch cutting under enclosure
18	P8190018.MOV	8/19/2019 13:18	Video of torch cutting under enclosure
19	P8190019.JPG	8/19/2019 13:18	Cut scrap inside the enclosure
20	P8190020.MOV	8/19/2019 13:20	Video of torch cutting under enclosure
21	P8190021.JPG	8/19/2019 13:20	Flaps covering opening to enclosure